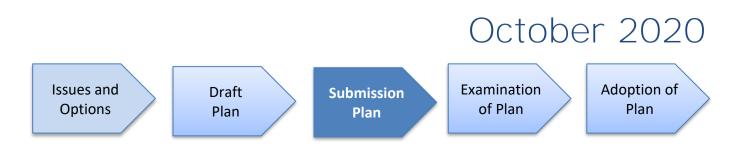


Reviewing the Plan for **Solihull's Future**

Solihull Local Plan Review

Reg 19 Draft Local Plan: Protecting the Environment Topic Paper



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1. Introduction

- 1. This Topic Paper is part of a series of papers supporting the Council's Submission Draft Local Plan, which has been published for consultation. The topic papers look at the relevant national and local guidance that impact on the plan's policies and proposals. They also provide a summary of the relevant evidence base and consultation responses, and how these have been used to shape the Plan to date.
- 2. The topic papers have focussed on the issues that have been subject to more significant change from 2013 local plan and address the following:
 - Relevant national & regional policy
 - Identify the evidence used to inform the policy/policies
 - Explain how evidence has been used to shape the policy
 - Explain how representations on previous iterations of plan have been used to shape the policy

2. Background

Climate Change Policy in the Solihull Local Plan 2013

- 3. The 2013 Local Plan identified Climate Change as key challenge (F) and tackling climate change was central to the spatial strategy, site allocations and policies. The Local Plan introduced a new policy dedicated to Climate Change, Policy P9, which focused on mitigation and adaptation measures.
- 4. Furthermore, the theme of tackling climate change runs through a number of policies, i.e.:
 - P1 'Support Economic Success', P2 'Town Centres', P3 'Provision of Land for General Business & Premises' (e.g. locating development in sustainable locations),
 - P7 'Accessibility & Ease of Access' and Policy P8 'Managing Travel Demand & Reducing Congestion' (e.g. encouraging sustainable modes of transport);
 - P10 'Natural Environment' (e.g. increasing green infrastructure);
 - P11 'Water Management' (e.g. minimising flood risk);
 - P12 'Resource Management' (e.g. reduce carbon emissions from waste activities);
 - P13 'Minerals' (e.g. efficient use of aggregates);
 - P15 'Securing Design Quality' and P16 'Conservation of Heritage Assets and Local Distinctiveness' (e.g. layout and design);
 - P17 'Countryside and Green Belt' (e.g. safeguarding best and most versatile agricultural land);
 - P20 'Open Space, Children's Play, Sport, Recreation and Leisure (e.g. protecting open space),
 - P21 'Developer Contributions and Infrastructure Provision' (e.g. infrastructure to support sustainable development).
- 5. The specific policy, Policy P9 'Climate Change', aimed to address carbon reduction for new development in the form of reducing energy demand of new buildings and providing low to zero carbon sources of energy. The policy sets out a sequential approach; first focusing on decentralised energy and heating networks where feasible and viable, then on-site measures incorporating design, energy efficiency and renewable energy generation where decentralised schemes are not feasible. Where decentralised networks are not feasible or viable, on-site energy efficiency measures and low carbon energy generation should provide a carbon reduction equivalent to a minimum of 20% of predicted energy requirements, with higher levels of the Code for Sustainable Homes encouraged where viable. The policy also seeks to ensure resilience to the impacts of climate change through a range of adaptation measures.
- 6. In terms of providing decentralised heat and energy networks, various locations have been considered since the adoption of the Local Plan and one scheme is currently being developed in Solihull town centre.
- 7. In terms of reducing the energy requirement of new homes through e.g. the Code for Sustainable Homes certification, there have been a number of changes at national level, which have affected the delivery of this policy.

- 8. Shortly following the adoption of the Solihull Local Plan, the Government issued a Written Ministerial Statement (WMS) in March 2014 responding to the Housing Standards Review consultation. The WMS proposed to wind down the Code for Sustainable Homes and consolidate many of the standards in the Building Regulations. This was followed by a further WMS supporting the Deregulation Act in March 2015, which made clear that the Government intended that planning authorities should only use national standards not locally derived standards. Accordingly, it was recognised that flexibility in the application of Policy P9 was essential, with the standard in the policy being desirable, but lesser standards acceptable.
- 9. One of the key aims of the Local Plan Review is to be informed by the most up-to-date evidence on climate change and give a clear steer on the approach to reducing carbon emissions and adapting to and mitigating against climate change effects.

3. Local Plan Review

Introduction

10. In July 2015 the Council decided that instead of pursuing a Local Area Plan (LAP) for potential development around the HS2 Interchange, it should be pursued through a review of the Solihull Local Plan (SLP) which was adopted December 2013. Two further factors also pointed to an early review of the plan; namely to deal with the legal challenge to the housing requirement in the SLP and to address the housing shortfall that is occurring in the wider housing market area.

Scope, Issues and Options (2015)

- 11. The Scope, Issues & Options document was published for consultation from November 2015 to January 2016¹. It sought views on a local plan review for the period from 2014 to 2033 and set out the evidence to be collected, strategic matters, challenges and initial views on the level of growth needed; and the options for accommodating the growth.
- 12. The consultation document recognised that a raft of evidence studies are required to support the development of the Local Plan Review, and indicated that work was commencing on commissioning or preparing the studies.
- 13. The consultation document asked to what extent the 2013 adopted policies required updating; it was proposed that Policy P9 only required minor amendments.
- 14. The consultation document set out the following key issues/questions:
 - That to meet the Borough's own housing needs a housing target of 13,500 dwellings over the plan period to 2033 should be accommodated. This would mean that it would be necessary to identify sites for at least a further 4,000 dwellings over and above those planned to be built under the SLP. But this should be considered a minimum figure.
 - Recognition that under the duty to cooperate Solihull may have to accommodate some of the 37,500 dwelling shortfall that is occurring in the Housing Market Area.
 - The HS2 rail link and interchange presents a major opportunity to maximise the economic and social benefits for the Borough and wider area, which will not be delivered through the HS2 proposal alone.
 - That the vision for UK Central represents one of the most significant opportunities for growth; in particular in the area around the Hub (including the HS2 Interchange site).
 - The need for a comprehensive review of the Green Belt through a Green Belt Assessment.
- 15. The SIO identified seven broad potential options for accommodating growth and the opportunities and challenges these options may provide (see below).

¹ https://www.solihull.gov.uk/Portals/0/Planning/LPR/LPR_Scope_Issues_and_Options_Consultation_Full.pdf

Option	Location	Climate Change Impacts	Risks	
A	Public transport corridors	Can provide for a sustainable pattern of development.	Limited scope for new development in urban	
		Range of transport modal choice, and lower transport emissions.	areas	
В	Solihull Town Centre	One of most sustainable and accessible locations in Borough,	Less scope for traditional family	
		Range of transport modal choice, and lower transport emissions.	housing	
		Potential for district heat and energy network		
С	North Solihull/Chelmsley Wood	Can provide for a sustainable pattern of development.	Limited development opportunities.	
			Challenging viability.	
D	Shirley Town Centre and the A34 corridor	Can provide for a sustainable pattern of development.	Limited development opportunities.	
E	UKC Hub and HS2	Can provide for a sustainable pattern of development.	Delivery later in plan period.	
		Potential to provide a vibrant mixed use community in line with garden city principles.	Complex infrastructure needs.	
F	Limited expansion of rural villages/settlements	Enable new and existing services to become more viable.	Limited public transport accessibility in most rural locations which are very unlikely to offer a genuine choice of transport modes.	
G	New settlements/large scale urban extensions or significant expansion of rural village	May enables higher frequency public transport to rural settlements more viable. Urban extensions may offer the opportunity to extend high frequency services.	Exacerbate a fragmented landscape.	

Scope, Issues and Options - Interim Sustainability Appraisal

- 16. To support the Scope, Issues & Options 2015, a sustainability appraisal was undertaken and published along with the consultation document². 'Climate Change and Energy' were one of the four main themes that the appraisal tested the policy changes and the growth options.
- 17. The Sustainability Appraisal noted that 'while most of the sustainability objectives are supported by the anticipated policy framework, the following objectives are least well addressed: business adaptation to climate change; losses from flooding, urban adaptation.'³

https://www.solihull.gov.uk/Portals/0/Planning/LPR/Sustainability_Appraisal_Scope_%20Issues_%20Options.pdf

 ² https://www.solihull.gov.uk/Portals/0/Planning/LPR/Sustainability_Appraisal_Scope_%20Issues_%20Options.pdf
 ³ p.3. Source:

Interim SA - Review of Adopted Local Plan Policies

18. In reviewing the existing Local Plan, the Interim SA proposed that:

- 'Climate Change' should be explicitly referenced in Policy P1, referring to development in the UKC Hub Area;
- It is unclear how sustainable construction & renewable energy will be taken into account in viability terms in relation to Policy P4;
- Policy P5 should be clearer on how climate change will be taken into account in Development Briefs;
- A more detailed appraisal of Policy P9 acknowledges that the loss of Government schemes to promote renewable energy lowers the potential effects of the adopted policy from a moderate negative effect to a minor negative effect upon the viability of housing schemes. The effects would also be localised to where distributed heating systems can be deployed. Five effects were noted as indirect as their effectiveness were due to how the policy would be implemented, rather than the policy itself. The Interim SA suggests that the Council ought to develop sufficient evidence to allow identification of key sites for distributed heat and energy networks in line with the NPPF, and that charging plug-in and other ultra-low emission vehicles should be encouraged.
- Policy P10 'Natural Environment', Policy P11 'Water Management' were shown to have a number of positive effects in terms of adapting to and mitigating climate change.
- It is anticipated that Policy P15 'Securing Design Quality' will need to be modified to take into account the withdrawal of Code for Sustainable Homes. Measures should also be included to enhance the public realm by adaptation to high winds and provision of green infrastructure.

Interim SA - Broad options for growth:

- 19. The consultation document put forward seven broad options for accommodating the growth needed in the Borough. Each of the options have different potential effects in relation to the theme climate change and energy, in terms of greenhouse gas emissions from vehicular traffic, opportunities for district heat and energy networks and energy efficient buildings.
 - Growth Option A: Public Transport Corridors The main benefits relate to achievement
 of identified regeneration and economic development objectives, increased access to
 jobs, and mixed use development. However, although there could be more reliance on
 public transport, and lower greenhouse gas emissions from car dependence, it could not
 be assumed that all new occupiers would be rail commuters.
 - Growth Option B: Solihull Town Centre High density town centre development more likely to be flatted and benefit those without families or the elderly. Could increase walking and cycling and use of public transport, but would need to ensure that local transport infrastructure can cope. Beneficial outcomes for 'climate change and energy'.
 - Growth Option C: North Solihull/Chelmsley Wood Acknowledges that opportunities for large scale housing in this area are limited. Could result in increased access to jobs, however, access to the Hub and HS2 employment sites more likely to be by car.

- Growth Option D: Shirley Town Centre & A34 Corridor Limited opportunities within the urban area. Could result in more car use along the A34 towards the M42 junction, and consequent congestion. Unlikely that developments would support decentralised heat and energy networks. Would increase access to jobs and could provide a range of housing types. Potential flood risks should be taken into account.
- Growth Option E: The UKC Hub & HS2 This option has benefits to increase prosperity by improving access to jobs and reducing inward commuting. The potential for resource efficiency and urban adaption due to creating a sustainable settlement, to include district heating/community power generation and high levels of energy efficiency. Positive effects would also have a wider benefit.
- Growth Option F: Limited Expansion of Rural Villages/Settlements Some rural services may be supported and local housing needs met, but this option may not deliver the scale of growth required and given the limited public transport accessibility in most rural locations there is unlikely to be a genuine choice of transport modes. In terms of climate change and energy them, the minor adverse effect is related to anticipated an increase in greenhouse gases due to more car travel.
- Growth Option G: New settlements, large scale urban extensions or significant expansion of rural villages/settlements – This option would result in a loss of open land and would need highway improvements, including the M42, and a range of infrastructure improvements. Conversely, access to jobs would increase, housing opportunities improve and viability of villages.

Scope, Issues and Options - Consultation Representations

- 20. The main responses to the consultation⁴ addressed housing needs, and proposed sites for inclusion in the Local Plan Review. However, concerns about climate change were also raised, and the need to emphasise sustainability, climate change, including reduction in carbon emissions and protection of natural assets.
- 21. In terms of the Council's response to representations on broad options for growth, it concluded that a range of options would be required, due to the lack of available land in the urban area to meet housing needs, and preferred options would be informed by an up-to-date evidence base, including the Solihull Connected Transport Strategy, Flood Risk Assessments, and the natural environment.

Draft Local Plan Review (2016)

- 22. The Draft Local Plan Review document was published for consultation from December 2016 to February 2017.⁵ It sought views on a local plan review for the period 2018-2033 and included revised Policies P1-P21 from the adopted Local Plan and a revised housing requirement figure of 15,765, to include a contribution of 2,000 dwellings to the Greater Birmingham HMA shortfall. The spatial strategy provided for 20 new allocations, 14 of which located in the Green Belt, and favouring sites with the capacity to promote sustainable patterns of development.
- 23. Policy P9 was updated to reflect the consultation responses to the Scope, Issues and Options Stage, recommendations in the Sustainability Appraisal and to respond to the

⁴https://www.solihull.gov.uk/Portals/0/Planning/LPR/Scope_Issues_and_Options_Summary_of_Represenations_and_R esponses.pdf

⁵ https://www.solihull.gov.uk/Portals/0/InfoandIntelligence/Solihull-Local-Plan-Review.pdf

outcome of the Government's Housing Standards Review and Written Ministerial Statements with regard to local plan standards (more detail provided in later sections). The policy structure was also re-arranged to clarify the policy objectives.

Draft Local Plan Review - Interim Sustainability Appraisal

- 24. An Interim Sustainability Appraisal was carried out on the Draft Local Plan's strategy, policies and Call for Sites/site allocations. The SA framework continued with the same four main themes as for the Scope, Issues and Options, including 'climate change and energy.'
- 25. Sites and policies were appraised against 19 SA objectives and tested 12 reasonable alternative strategies for housing growth and distribution have been appraised using the SA Framework.

Interim SA - Review of DLP proposed Policies

- 26. The revised policies responded to the recommendations in the SA to support the Scope, Issues and Options consultation;
 - Policy P1 encourages the "use of sustainability principles including minimising the use of natural resources and the use low carbon and renewable energy principles. Despite the potential to deliver exemplar green buildings, and the provision of green infrastructure, the likelihood of extensive car based commuting is anticipated to dominate greenhouse emissions."
 - Policy P2 Minor negative effects are associated with "These are associated with the absence of measures dealing with reducing travel [and] greenhouse gas emissions".
 - Policy P3 "a minor negative for greenhouse gases"
 - Policy P4 "there are also four minor adverse outcomes associated with potential effects on the environment... The consequences for the climate change and energy theme are unclear as there is no direct reference to sustainable construction."
 - Policy P5 "In terms of the climate change and energy sustainability theme, the policy is largely neutral in its effects, but the amount of growth generated is predicted likely to have a minor negative effect in terms of greenhouse gas emissions."
 - Policy P6 "Overall, this presents a positive picture across the SA framework."
 - Policy P7 "Should the policy be effective in promoting development in those areas with high levels of accessibility then there is a potential that this could contribute towards lowering greenhouse gas emissions."
 - Policy P8 & P8A "The policy has the potential to reduce greenhouse emissions through the reduction in travel and use of more sustainable modes of transport."
 - Policy P9 "This policy performs in a positive manner with eleven of the nineteen sustainability objectives reporting an effect of beneficial significance." "Being focused upon climate change, the policy is expected to deliver reductions in greenhouse gas emissions and also aid urban adaptation, in both cases resulting in major beneficial outcomes.
 - In terms of the effect of the policy upon the natural resource protection & environment theme, four of the outcomes are judged to be minor positive with one minor negative (pollution) and one neutral (historic environment).

- The policy, alongside the 2016 Building Regulations, is expected to contribute to reduced emissions and enhanced adaptation to the effects of climate change. The policy is anticipated to either definitely or likely to contribute towards five sustainability objectives, four of which are assessed as being moderate beneficial with one being minor beneficial."
- Policy P10 "This policy is slightly beneficial as there are six minor positive outcomes across the climate change and energy, natural resource protection and the sustainable communities themes."
- Policy P11 "A major beneficial outcome for flooding is the only outcome anticipated under the climate change and energy theme. Four minor positive outcomes are likely to arise under the natural resource protection theme (biodiversity, landscape, green infrastructure and pollution)."
- Policy P12 "This policy is predicted to give rise to two moderate beneficial outcomes (resource efficiency and greenhouse gases) and delivers eight minor beneficial outcomes. The remaining nine outcomes are considered to be neutral."
- Policy P13 "Mostly neutral effects, including reducing need to travel as a positive moderate outcome."
- Policy P14 "Within the climate change and energy theme, the policy is anticipated to give rise to one potential minor beneficial outcome on flooding."
- Policy P15 Responded to the SA for the SIO in terms of urban adaptation. "One major positive outcome is likely (urban adaptation) within the climate change and energy theme. This is accompanied by a potential moderate positive (flooding) and likely minor positive outcome (greenhouse gas emissions)."
- Policy P16 "This is because the policy expects adaptation measures to be sympathetic to the heritage asset, which could reduce climate change mitigation potential. However, it is possible to sensitively incorporate renewable energy technologies into developments without adversely affecting character."
- Policy P17 "neutral outcomes are forecast for the climate change and energy theme."
- Policy P18 "the policy generates a highly positive outcome upon the sustainability framework, including reducing the need to travel, reducing greenhouse gas emissions and improvements to green infrastructure."
- Policy P19 "no implications for climate change and energy."
- Policy P20 Largely beneficial or neutral outcomes, including mitigating the impact of flooding and urban adaptation to the heat island effect.
- Policy P21 Mostly beneficial or neutral outcomes. "Potential for contributions to be directed towards decentralised energy systems and heating networks to reduce carbon emissions [and] flood protection measures."
- 27. Conclusions: "The [adopted 2013] plan has broadly neutral effects in terms of climate change resilience/adaptation; though there are some positive effects related to the requirement for high quality sustainable design and sustainable urban drainage systems." This is because the proposed growth will increase population and associated increase in traffic, infrastructure and loss of open land in the Green Belt, which is then mitigated by

policies to reduce the need to travel, encourage energy efficient buildings, minimise flood risk and promote green infrastructure.

Draft Local Plan Review – Representations to Consultation

- 28. The Summary of Representations to the Draft Local Plan were reported to Cabinet Members on 18th July 2017.⁶ There were 1750 respondents to the consultation, comprising over 6,300 representations. The consultation did not have a specific question for Policy P9, but responses were under the theme 'Protecting the Environment.'
- 29. There was general support for the policy and the ambition to reduce carbon emissions on new developments. There was a view from the development industry that the policy should not exceed Government requirements; should promote a fabric-first approach to energy efficiency and should not rely on specific renewable energy technologies. It was also expressed that the Plan could be clearer on how achieving the aims of this policy will be balanced against other viability concerns. More general concerns were raised that a specific strategy should be laid out for suitable locations for renewable energy, and mixed views on opportunities on farmland. It was also recommended that a local energy plan be put in place to address wider decarbonisation measures of road transport and domestic and commercial heating.

Supplementary Consultation to the Draft Local

- 30. A Supplementary Consultation was published in January 2019⁷, which related specifically to proposed housing allocations and not policies. The Draft Local Plan had consulted on red line sites in 2016 and indicated estimated capacities based on the SHELAA (2016). Following further more detailed work on site constraints and deliverability issues, concept masterplans were drawn up for the proposed housing allocations and published in a separate document as part of the consultation.⁸
- 31. In terms of climate change mitigation and adaptation, provision of green infrastructure, retention of natural capital assets, avoidance of the areas of flood risk for development, promoting sustainable transport and prioritisation of pedestrian and cyclists, were key principles informing the concept masterplans.

⁶ https://www.solihull.gov.uk/Portals/0/Planning/LPR/DLP_-_Summary_of_Representations.pdf

 ⁷ https://www.solihull.gov.uk/Portals/0/Planning/LPR/Draft-Local-Plan-Supplementary-Consultation-Document.pdf
 ⁸ https://www.solihull.gov.uk/Portals/0/Planning/LPR/Solihull-Local-Plan-Review-Draft-Concept-Materplans.pdf

4. Strategic & Policy Context

Introduction

32. Climate change is regarded as one of the greatest challenges facing humanity and the future of the planet today. There is strong scientific consensus⁹ on both the causes of anthropogenic increases of greenhouse gases within the atmosphere, as well as the impacts. These direct impacts include a rise in global temperatures, sea level rises, disruptive weather patterns and biodiversity declines. These consequences will in turn result in loss of life and livelihoods due to flooding & drought, forest fires, crop failure, water shortages and heat waves.

National Strategic Context

33. The UK was the first country to introduce legally binding targets for the reduction of greenhouse gases in the Climate Act 2008. The Act also established the Committee on Climate Change (CCC)¹⁰ to ensure that emissions targets are evidence-based and independently assessed. Following advice in the publication of 'Net Zero – The UK's contribution to stopping global warming' by CCC¹¹, the Climate Change Act was amended in June 2019¹² to change the target from 80% reduction of 1990 levels to net zero by 2050. A net-zero GHG target for 2050 will also deliver on the commitment that the UK made by signing the Paris Agreement. ¹³

Regional Strategic Context

- 34. In June 2019, the WMCA declared a climate emergency. In July 2019 the Combined Authority Board received a paper from the Tyndall Centre outlining the trajectory that would be necessary in order to reach net zero carbon emissions by 2041 (see table below). In response, the WMCA then declared an even more ambitious target than the national legal target to reach net zero carbon by 2041¹⁴.
- 35. Following the agreement of the target, a green paper "#WM2041 Zero Carbon WM by 2041" was written to indicate how the region could take action in order to reach net zero carbon emissions by 2041. The paper contained 73 actions of varying scale, complexity and investment requirement and was consulted upon from 23rd January until 12th March 2020.
- 36. In June 2020, the WMCA introduced its response to the green paper, "WM2041: A Programme for Implementing an Environmental Recovery"¹⁵. As well as the consultation feedback, the response incorporates a low carbon green recovery plan from the effects of Covid-19 on the region, reflecting on the UK's Committee on Climate Change appeal to Government on the 6th May.
- 37. The CCC outline 5 areas that should be expanded immediately (all of which appear below in the WMCA plans):

⁹ <u>https://www.theccc.org.uk/what-is-climate-change/the-science-of-climate-change/</u>

https://royalsociety.org/-/media/Royal_Society_Content/policy/projects/climate-evidence-causes/climate-change-evidence-causes.pdf

¹⁰ https://www.theccc.org.uk/what-is-climate-change/the-legal-landscape/the-climate-change-act/

¹¹ https://www.theccc.org.uk/publication/net-zero-the-uks-contribution-to-stopping-global-warming/

¹² http://www.legislation.gov.uk/uksi/2019/1056/introduction/made

¹³ https://www.gov.uk/government/news/uk-ratifies-the-paris-agreement

¹⁴ https://www.wmca.org.uk/news/climate-change-target-set-for-the-region/

¹⁵ <u>https://governance.wmca.org.uk/documents/s4271/2%20B%20WM2041%20Appendix.pdf</u>

- Investments in low-carbon and climate-resilient infrastructure;
- Supporting reskilling, retraining and research for a net-zero, well-adapted economy;
- Upgrades to our homes ensuring they are fit for the future;
- Making it easy for people to walk, cycle, and work remotely;
- Tree planting, peatland restoration, green spaces and other green infrastructure.
- 38. The green recovery plan sets out activities that will have immediate impact and/or set a clear direction of travel for the kind of recovery we expect in the West Midlands include:
 - West Midlands Green Financing
 - West Midlands Clean Growth Challenge
 - WM Circular Economy Taskforce Community Green Grants
 - Reinforcing the region's energy infrastructure to support green growth
 - Active Travel
 - Urban Transformation Fund (Brownfield sites)
 - Communications and behaviour change

Carbon budgets

- 39. Under the Climate Change Act 2008, the Government must set five-yearly carbon budgets, twelve years in advance, from 2008 to 2050. The Government is required to consider—but not follow—the advice of the Committee on Climate when setting these budgets. The headline target of the Act was amended in June 2019 to reflect the Government's net zero ambitions. The aim is to meet the 2008 Act's target of reducing greenhouse gas emissions by 100% by 2050 compared to 1990 levels.
- 40. The WMCA carbon budgets have been informed by research from the University of Manchester's Tyndall Centre. The research is informed by the latest science on climate change and defined in terms of science-based carbon setting. The report 'Quantifying the implications of the United Nations Paris Agreement'¹⁶ presents climate change targets which translate the "well below 2°C and pursuing 1.5°C" global temperature target and equity principles in the United Nations Paris Agreement to a national UK carbon budget. The UK budget is then split between sub-national areas using different allocation regimes. The report provides with budgets for carbon dioxide (CO2) emissions and from the energy system for 2020 to 2100.¹⁷
- 41. This work includes two interim carbon budgets of 36% reduction by 2022 and 69% reduction by 2027. The focus in on rapid transition towards a zero-carbon future where action must be 'front-loaded' in order to meet this target the WMCA would need to meet year-on-year carbon emissions reductions of 13%.

UK Budget ¹⁸	Reduction below	WMCA budget ¹⁹	Reduction	below
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¹⁶ https://carbonbudget.manchester.ac.uk/reports/

¹⁷ Aviation and shipping emissions remain within the national UK carbon budget and are not scaled down to subnational budgets. Land Use, Land Use Change and Forestry (LULUCF) and non-CO2 emissions are considered separately to the energy CO2 budget in this report.

¹⁸ https://www.theccc.org.uk/what-is-climate-change/reducing-carbon-emissions/carbon-budgets-and-targets/

	1990 levels		2018 levels
1 st Carbon budget (2008-	25%	N/A	
12)			
2 nd C-budget (2013-17)	31%	N/A	
3 rd C-budget (2018-22)	37% by 2020 ²⁰	Up to 2022	36% by 2022
4 th C-budget (2023-27)	51% by 2025	Up to 2027	69% by 2027
5 th C-budget (2018-32)	57% by 2030	Up to 2032	Not stated
6 th C-budget	% Due Sept	Up to 2037	
	2020 ²¹		
		Up to 2041	100% by 2041 ²²
Final budget	100% by 2050		••
	(net zero)		

- 42. The UK is currently in the third budget and is on track to outperform the target for the period up to 2022. However, despite these advancements, the CCC is concerned the UK is not on course to meet the more exacting targets of the fourth budget, without a more substantial step-change in carbon reduction initiatives, and implementing them sooner e.g. the Road to Zero phasing out of petrol and diesel cars.
- 43. As set out in this Topic Paer, the WMCA and its constituent authorities are setting out a multi-pronged approach to radically reduce greenhouse gas emissions in the region.

Clean Growth Strategy (2018)²³

- 44. The Clean Growth Strategy sets out a comprehensive set of policies and proposals that aim to accelerate the pace of "clean growth", i.e. deliver increased economic growth and decreased emissions, across the UK.
- 45. The Strategy reported that in the period 1990-2015 the economy grew by two-thirds, but the UK had reduced carbon emissions by over 40%. The main gains have been made in the power sector, waste and industry, and to a lesser extent household emissions. This is due to phasing out of coal-fired power stations and increase in off-shore wind, solar energy and nuclear power (in 2016 a quarter of electricity was supplied by renewable sources). Landfill tax credits have incentivised a reduction in landfill and increase in recycling and waste to energy plants, and industry emissions have reduced largely because of a shift in the economy from manufacturing to services. Tighter Building Regulations and obligations (ECO) on energy suppliers to improve energy efficiency have driven down emissions whilst the housing stock has grown. However, emissions from transport have only shrunk slightly as increases in engine efficiency and uptake of low emission vehicles has been cancelled out by year-on-year increase in road use.

¹⁹ WMCA #2041 Green Paper, Jan 2020. https://governance.wmca.org.uk/documents/s3856/

²⁰ 44% reduction achieved by 2018

²¹ https://www.theccc.org.uk/2019/10/17/ccc-to-publish-sixth-carbon-budget-in-september-2020/

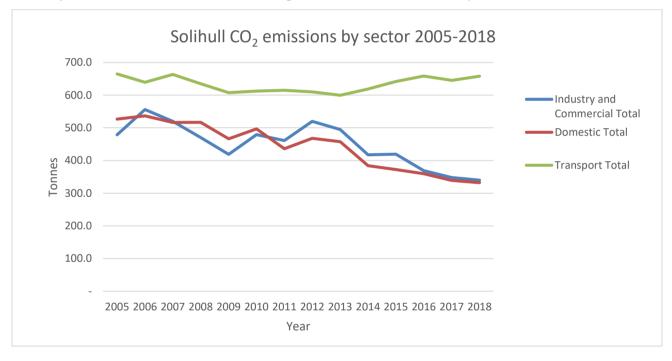
²² Although on a closer read, this is 0.9MtCO2, or 96% less than 2015 levels

Table 1: Greenhouse gas emissions by sector, 1990-2015⁴⁶

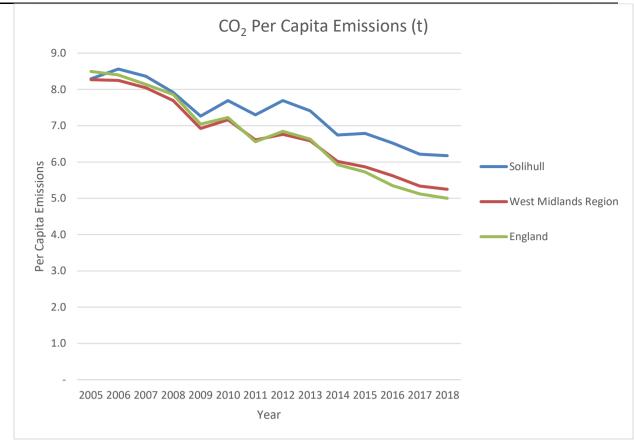
	Emissions (Mt)		
Sector	1990 base year47	2015	Percentage change 1990-2015
Business and industry	231	123	-47%
Transport	122	120	-2%
Power	204	104	-49%
Natural resources	152	77	-50%
Homes	80	64	-20%
Public sector	13	8	-40%
Total	803	496	-38 % ⁴⁸

Source: BEIS

46. Data on CO₂ emissions by local authority are only available from 2005 to 2018. Solihull follows a similar trajectory to the national picture, with the biggest reductions made in industry and the domestic sector, but marginal net reductions in transport:²⁴



²⁴ Last updated 25th June 2020: https://data.gov.uk/dataset/723c243d-2f1a-4d27-8b61-cdb93e5b10ff/emissions-of-carbon-dioxide-for-local-authority-areas



National Planning Policy Framework

- 47. Addressing climate change is at the heart of planning and one of the core land use planning principles which the National Planning Policy Framework expects to underpin both planmaking and decision-taking.
- 48. Section 19 (1A) of the Planning and Compulsory Purchase Act (2004)²⁵, states:
- 49. Development plan documents must (taken as a whole) include policies designed to secure that the development and use of land in the local planning authority's area contribute to the mitigation of, and adaptation to, climate change.
- 50. Since the consultation on the Draft Local Plan Review (Dec 2016 Feb 2017) the NPPF has been updated in July 2018, and then again to take into account the new standard methodology in February 2019. Changes that affect climate change are: the distinction between strategic and local policies²⁶; explicit reference is made to providing space for physical protection measures, or making provision for the possible future relocation of development and infrastructure vulnerable to climate change impacts²⁷ and reference to the Government's technical standards rather than zero carbon buildings policy²⁸.

²⁵ as amended by Section 182 of the Planning Act 2008: https://www.legislation.gov.uk/ukpga/2008/29/section/182

²⁶ Para. 20

²⁷ Para. 149

²⁸ Para. 150

51. 'Mitigating and adapting to climate change, including moving to a low carbon economy' are considered central tenets to achieving the goal of sustainable development in the NPPF.²⁹ From the glossary:

Climate change adaptation: Adjustments made to natural or human systems in response to the actual or anticipated impacts of climate change, to mitigate harm or exploit beneficial opportunities.

Climate change mitigation: Action to reduce the impact of human activity on the climate system, primarily through reducing greenhouse gas emissions.

Planning Practice Guidance

52. The section on Climate Change was first published in 12 June 2014, and updated 15th March 2019.

"Addressing climate change is one of the core land use planning principles which the National Planning Policy Framework expects to underpin both plan-making and decisiontaking. To be found sound, Local Plans will need to reflect this principle and enable the delivery of sustainable development in accordance with the policies in the National Planning Policy Framework. These include the requirements for local authorities to adopt proactive strategies to mitigate and adapt to climate change in line with the provisions and objectives of the Climate Change Act 2008, and co-operate to deliver strategic priorities which include climate change.

In addition to the statutory requirement to take the Framework into account in the preparation of Local Plans, there is a statutory duty on local planning authorities to include policies in their Local Plan designed to tackle climate change and its impacts."³⁰

53. The Planning Practice Guidance sets out the following:

Examples of mitigating climate change by reducing emissions:

- Reducing the need to travel and providing for <u>sustainable transport</u>
- Providing opportunities for <u>renewable and low carbon energy technologies</u>
- Providing opportunities for decentralised energy and heating
- Promoting <u>low carbon design approaches</u> to reduce energy consumption in buildings, such as <u>passive solar design</u>

Examples of adapting to a changing climate:

- <u>Considering future climate risks when allocating development sites to ensure risks</u> <u>are understood over the development's lifetime</u>
- Considering the impact of and promoting design responses to <u>flood risk and coastal</u> <u>change</u> for the lifetime of the development
- Considering availability of <u>water and water infrastructure</u> for the lifetime of the development and design responses to promote water efficiency and <u>protect water</u> <u>quality</u>
- 54. Further discussion on the impact of the NPPF and PPG is provided in Section 6 of the Topic Paper below.

²⁹ Para. 8

³⁰ Paragraph: 001 Reference ID: 6-001-20140306

Future Homes Standard Consultation

- 55. In the 2019 Spring Statement, the Government committed to introducing a "Future Homes Standard" for new build houses and mandating an end to fossil fuel heating for new homes from 2025.³¹
- 56. In October 2019, the Government commenced its first consultation on the Future Homes Standard. The Government anticipates that the FHS would need to reduce the greenhouse gas emissions of homes by 75-80% compared to the current Part L of the Building Regulations (last updated in 2013). The consultation document proposed a stepping stone of either a 20% (Option 1) or 31% (Option 2) reduction in emissions, to both prepare the development and construction industry for meeting the higher standards in 2025 and to ensure that reductions are introduced sooner rather than later.
- 57. The updated Building Regulations would be applied to all new residential build, regardless of tenure or type of dwelling. The consultation sought views on not only the principle of updating the Regulations but also a number of more technical and detailed questions relating to construction methods. The consultation recognised that new build is a small proportion of the overall housing stock and stated that the Government expected to launch a further consultation in 2020 to address existing domestic buildings, and new and existing non-domestic buildings.
- 58. Option 1 would be comparable to the Code Level 4 equivalent, whereas Option 2, the Government's preferred option, would exceed that level.
- 59. In response to the consultation, the Council agreed that Option 2 would be preferred, but also urged the Government to implement the highest possible standards and commit to netzero carbon homes as soon as possible.
- 60. Either of these Options would meet or exceed Code Level 4 equivalent, and would cancel out the provisions in the current Planning Practice Guidance, whilst making the tightening of Building Regulations and consequent benefits in carbon reduction and lower fuel bills mandatory and across type and tenure.

Rising to the Climate Crisis (2018)

- 61. In December 2018, the RTPI and TCPA updated their document 'Rising to the Climate Crisis A Guide for Local Authorities on Planning for Climate Change' in response to the revised NPPF. The Guide focuses on mitigation (particularly in relation to energy use and generation), adaptation, and resilience.
- 62. The Guidance highlights the importance of the legal duty Section 19 of the 2004 Planning and Compulsory Purchase Act (as amended by the Planning Act 2008) with regard to ensuring that, taken as whole, plan policy contributes to the mitigation of, and adaptation to, climate change. Furthermore, the NPPF is guidance, but not statute, and also refers to how Plans should take a proactive approach to mitigating and adapting to climate change in line with the objectives and provisions of the Climate Change Act 2008 (Para. 149).
- 63. The Guidance sets out a package of measures that create a pathway from setting objectives to evidence-gathering and specific mitigation and adaptation policies. The measures build upon and amplify the approach set out in the NPPF and Planning Practice Guidance:
 - Overarching climate change objectives in local planning, e.g.

- \circ Shape places to help secure radical cuts in greenhouse gas emissions;
- Delivery highest viable energy efficiency, including use of decentralised energy;
- o Reduce the need to travel;
- Actively support and help to drive the delivery of renewable and low-carbon energy generation and grid infrastructure;
- Shape places and secure new development to minimise vulnerability and provide resilience to impacts arising from climate change, in ways consistent with cutting greenhouse gas emissions;
- Ensure that there are real opportunities to take positive action on climate change by encouraging community-led initiatives such as the promotion of decentralised renewable energy use or securing land for local food sourcing;
- o Increase sustainable transport use and local transport solutions.
- Evidence base for plan-making, e.g. heat mapping and renewable energy feasibility options
- Evidence on viability
- Consider established assessment frameworks, e.g. BREEAM
- Evidence on adaptation measures, e.g. flood risk assessments, green infrastructure networks
- Evidence on mitigation measures, e.g. approach to reduce carbon emissions, and encouraging sustainable construction
- Setting requirements for decentralisted heat and energy networks
- Setting requirements for on-site low carbon/renewable technologies (Merton Rule)
- Options for Electric Vehicle charging and infrastructure
- 64. It is recognised that the planning system is subject to near constant reform and technologies are advancing all the time, as such the Guidance is a live document. Indeed, since the 2nd edition the Climate Change Act has been amended to a net-zero carbon commitment by 2050 rather than the 80% reduction compared to the 1990 baseline.

5. Summary of Key Evidence

Climate Change Emergency - Statement of Intent to Protect the Environment

- 65. On the 8th October 2019, the Full Council unanimously approved a Climate Change Emergency and published a 'Statement of Intent to Protect the Environment.'³²
- 66. It states that the Solihull MBC recognises the gravity of the climate change emergency and will through its Climate Change Prospectus seek to minimise the environmental impacts of its own activities and will contribute to the improvement of the wider environment through local action.
- 67. The Statement of Intent has 9 actions:
 - Use every effective means to raise awareness, with the public and partners, of the issues and encourage individual action to reduce environmental impact.
 - Take action to reduce emissions of greenhouse gases and air pollutants from our own activities, buildings, transport, resources and waste, ensuring that we continue to invest in the Borough's natural capital, greening the borough's economy through our local plan and investments aiming to become net carbon zero, as a Council, by 2030.
 - A Carbon Budget for Solihull Council will be set with clear targets for annual reductions in CO2 emissions. The progress on these targets will be reported annually to Full Council.
 - A Solihull Council will collaborate with and support the Combined Authority in its plan for a West Midlands target of net-zero emissions by 2041, making sure we take communities with us, protect employment, and avoid adversely affecting the local economy and impoverishing deprived communities.
 - To work with the WMCA in seeking from the UK Government the powers and resources to help deliver a just tradition.
 - Lead by example and actively encourage responsible environmental practice amongst staff, contractors, suppliers and residents, and encourage local communities to start taking action to implement local air quality and carbon dioxide (CO2) reduction initiatives.
 - Establish a Climate Change Commission that can make recommendations to how we can further the aims of the Climate Change Prospectus and achieve the aims of this Declaration.
 - Engage with businesses, schools and the wider community to promote less polluting technology and modes of transport, and more energy-efficient buildings in the Borough.
 - We will produce a robust, credible and fair Energy Framework which will drive the delivery of a low carbon borough, ensuring that local challenges and opportunities are fully understood and enabling Solihull to play its full part in delivering regional targets.
- 68. Officers updated the Council on progress on the Statement of Intent to the Cabinet Member for Climate Change, Planning and Housing on 17th February 2020. The Council will seek to lead by example on its own carbon management programme; to embed the sustainability agenda into the work of all directorates across the Council and tackling climate change to be

³² Item 10: http://eservices.solihull.gov.uk/mgInternet/ieListDocuments.aspx?Cld=125&MId=7717

as a cross-Council objective and not a single issue and promote Natural Capital through the Local Plan Review.

Low Carbon & Energy Framework

- 69. The Low Carbon Energy Framework is part of Solihull Council's response to the Climate Emergency and will create a Net Zero Action Plan to identify what is required for Solihull to meet its carbon declaration ambitions of:
 - Net Zero by 2030 for Solihull MBC's own emissions; and
 - Net Zero by 2041 for the borough's emissions
- 70. The Framework will continue to be developed throughout 2020. Priorities include commissioning studies and developing strategies:
 - Net Zero Action Plan for Solihull
 - Renewable Energy Feasibility Study for Solihull
 - Solihull Offsetting and Carbon Sequestration Strategy
 - Decarbonisation Feasibility studies

Proposed Approach:

- 71. Defining Net Zero for Solihull: Net Zero Emissions means balancing emissions by human activity with the greenhouse gases removed from the atmosphere through offsetting or sequestration.
- 72. Carbon Reduction Hierarchy: There needs to be step change in order to get to net zero, this will require a huge amount of carbon emission reduction. It is proposed to take a hierarchy approach:



Carbon Reduction Hierarchy

73. The Framework will identify specific changes required, and will aim to provide a bespoke solution for Solihull considering a combination of technology and behaviour change that will require support from regional and national government strategy and investment to achieve net zero.

- 74. Some initial opportunities are emerging as a result of the Framework development. More opportunities and challenges will become clear as we progress through the development of the Framework:
 - UK Central Hub
 - Energy Innovation Zone in UK Central
 - Local Plan Review and new developments
 - Smart Local Energy Systems
 - Reducing Transport Emissions
 - Heat networks and heat pump technology
 - Hydrogen and other low carbon fuel sources
 - Renewable opportunities
 - Behaviour change
- 75. At the time of writing the Topic Paper, the Net Zero Action Plan and Renewable Energy Feasibility Study are underway, and an update will be provided in the Submission version of the Topic Paper.

Climate Change Prospectus (March 2020)³³

- 76. In response to the Council's 'Statement of Intent to Protect the Environment', the Council's Green Prospectus was updated to the Council's Climate Change Prospectus to articulate Solihull's low carbon vision and focus on clean growth, clean air, nature gain and engagement.
- 77. The Prospectus recognises that: "Solihull's Local Plan Review aims to deliver a substantial level of growth. Whilst this degree of development and infrastructure presents huge opportunities we must plan carefully to ensure that the potential negative impacts from growth are minimised and opportunities for delivering sustainable growth are maximised. We need to ensure Solihull captures every economic opportunity it can from the global shift to low carbon technology and services."
- 78. The 6 key objectives are:
 - Create an economic environment that supports progressive, innovative businesses to make the transition to a low carbon economy and deliver Solihull's green growth aspirations.
 - Develop and efficient and low carbon infrastructure that enables and maximise the opportunity for low carbon economic growth.
 - Improve the energy efficiency of domestic, commercial and industrial buildings in Solihull to reduce the energy demand required.
 - Efficiently accommodate the future demand for movement. Enhancing Solihull as a sustainable, healthy place to live and work.
 - Invest in the Borough's natural environment to maximise its benefit to people and wildlife. Understand the risks from climate change and adapt accordingly.

³³ <u>http://eservices.solihull.gov.uk/mginternet/mgConvert2PDF.aspx?ID=79730</u>

• Encourage and enable active participation in sustainability issues – supported by effective communication.

West Midlands Low Emissions Towns and Cities Programme – Good Practice Air Quality Guidance (2014)

- 79. The Low Emissions Towns and Cities Programme (LETCP) seeks to promote joint working across the West Midlands Metropolitan Area to reduce road transport emissions, including Oxides of Nitrogen (NOx) and fine particulates (PM10 and PM2.5), whilst simultaneously seeking reductions in greenhouse gases.³⁴
- 80. The Good Practice Air Quality Guidance seeks to provide a model approach for integrating air quality considerations into land-use planning policies that can influence the reduction of road transport emissions
- 81. Solihull is the only local authority of the seven Metropolitan authorities that does not have an Air Quality Management Plan, however, in 2019, the Council did adopt its first Clean Air Strategy³⁵ with the aim of improving air quality across the borough, and the concomitant objectives of improving health outcomes and reducing greenhouse gas emissions.
- 82. The Good Quality Practice Air Quality Guidance makes a number of recommendations for planning policy including:
 - Electric Vehicle Recharging Provision, with the provision rates of:
 - o 1 charging point per residential unit (dwellings with dedicated parking);
 - \circ 1 charging point per 10 residential parking spaces (unallocated parking, e.g. flatted development);
 - 10% of commercial/retail or industrial parking spaces (this may be phased with 5% provision initially and a further 5% trigger).
 - Travel plans including mechanisms for discouraging high emission vehicle use and encouraging modal shift, (i.e. public transport, cycling and walking) as well as the uptake of low emission fuels and technologies.
 - Contribution to renewable fuel and energy generation projects.

Electric Vehicle Strategy (2020)³⁶

- 83. At 46% of total carbon emitted, road transport represents the primary source of carbon emissions in Solihull. In addition, road transport is the primary contributor to harmful Oxides of Nitrogen (NOx) air pollutants that negatively affects the Borough's air quality.
- 84. Decarbonisation of the transport network will be achieved through a wide range of approaches incorporating measures to: reduce travel demand, increase levels of walking, cycling and mass transport use, as well as developing new models of mobility such as autonomous and demand responsive transport.
- 85. Whilst the above measures have the potential to improve air quality and reduce carbon emissions through reduced, greener or more efficient journeys, it is recognised that private

%20Appen%201.docx.pdf

³⁴<u>https://go.walsall.gov.uk/Portals/0/Uploads/PollutionControl/letc_good_practice_air_quality_planning_guidance_ma</u> y_2014.pdf

³⁵ <u>https://www.solihull.gov.uk/Portals/0/StrategiesPlansPolicies/Solihull-Clean-Air-Strategy.pdf</u>

³⁶<u>http://eservices.solihull.gov.uk/mgInternet/documents/s81836/Electric%20Vehicle%20Strategy%20-</u>

transport will remain a significant mode of travel across the Borough. Therefore, these measures should be complemented with mechanisms to reduce private vehicle emissions.

86. In order to achieve these aims, this strategy has four main objectives:

(a) Enable all residents, businesses and visitors to Solihull to have access to EV charging infrastructure that is reliable, convenient to use and competitively priced;

(b) Ensure residents and local businesses understand the benefits of EVs and are aware of the availability of charging infrastructure and related services in Solihull;

(c) Engage with residents and all local stakeholders to understand their challenges and concerns and support them in achieving increased adoption of EVs;

(d) Ensure that the Council leads by example in the Borough-wide transition to electric vehicles.

87. The Strategy refers to the Local Plan Review: "this review provides the opportunity to amend relevant policies within the Local Plan to support increased provision of charging infrastructure in new residential and commercial dwellings identified as part of the plan."

Solihull Town Centre Heat Network Feasibility work (2010-2020)

- 88. Emissions from heat are the single biggest contributor to UK emissions, accounting for over 40% energy consumption with the majority of buildings and industrial processes using fossil fuels to generate heat. Recent data measures are over 400,000 tonnes of CO2e emissions from heating in Solihull borough; this is almost 30% of Solihull's total emissions.³⁷
- 89. As part of the evidence base of the 2013 adopted Local Plan Solihull Council commissioned the "Renewable and Low Carbon Energy Resource Assessment and Feasibility Study" as a joint project with other local authorities in Warwickshire.³⁸ The Council started exploring the options of a CHP district heat and energy network in the main town centre in 2010.³⁹ In September 2011, Officers reported to Council that after the findings of a high level feasibility study and initial consultation with key stakeholders in the Town Centre, it was decided to not pursue the district heat and energy network at this time.⁴⁰
- 90. Solihull Town Centre Heat Network Feasibility Study was commissioned following a GBSLEP Energy Mapping and Masterplanning Study, which identified Solihull Town Centre and UK Central Hub as clusters of high heat demand and therefore potential heat network opportunities⁴¹. An application for feasibility study funding and project management support for Solihull Town Centre and UK Central Hub was approved by the BEIS Heat Network Delivery Unit (HNDU) in 2016 and commenced in 2017. The diagram below show initial output of heat mapping in Solihull for the GBSLEP work, darker areas indicating higher heat use. These do not preclude future developments to be considered outside of these core areas, such as larger mixed use developments or high heat demand businesses coming

³⁷http://eservices.solihull.gov.uk/mgInternet/documents/s79830/Appendix%201%20-

^{%20}Town%20Centre%20Energy%20Network%20Cabinet%20Report.pdf

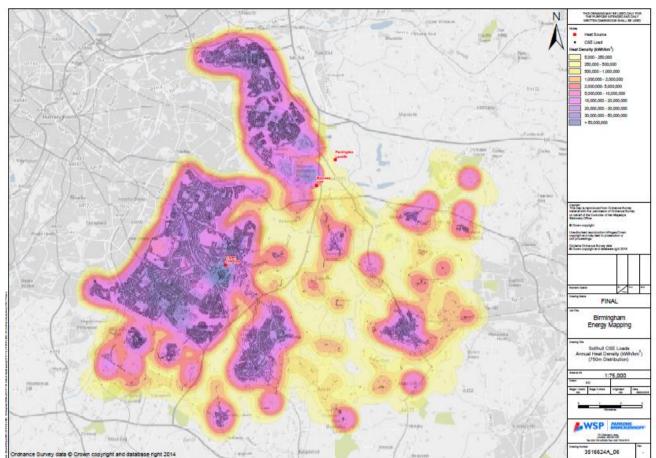
³⁸https://www.solihull.gov.uk/Portals/0/Planning/LDF/Renewable and Low Carbon Energy Resource Assessment.pd

³⁹http://eservices.solihull.gov.uk/mginternet/Data/CPH%20Resources%20Decision%20Session/201101241800/Agenda/ Appendix%20A%20-%20att28291.pdf

⁴⁰http://eservices.solihull.gov.uk/mginternet/Data/Cabinet/201109151600/Agenda/Report%20of%20the%20Director% 20of%20Resources%20-%20att30920.pdf

⁴¹<u>http://eservices.solihull.gov.uk/mgInternet/documents/s55977/EDMG%20Scrutiny%20-</u>

forward in the Borough, which could trigger a new opportunity in a currently unmarked area.



91. The 2016 Solihull Town Centre Masterplan⁴² further highlighted the town centre as potential opportunity site for a heat network:

"Retrofitting a heat network into an already developed site such as a town centre is complicated, so it is timely that whilst developing a masterplan which will guide future development of the town centre, that the opportunity for a heat network to be established is also being considered. The heat network would require significant infrastructure to be installed. Having a masterplan for the town centre enables us to understand what future development in the town centre may look like, and ensure that infrastructure work undertaken to enable future development is coordinated with the installation of heat network infrastructure."

92. A key next stage was investigative work of a test borehole to verify water flow rates from the aquifer beneath Tudor Grange Park to assess the potential of an open loop ground source heat pump system.⁴³ Unfortunately whilst the trial borehole indicated a potentially adequate heat source (i.e. water volume), the recharge rate back into the ground was identified to be severely limiting, and would not satisfy the Environment Agency requirements. The scheme would therefore require many more recharge boreholes than

⁴² <u>https://www.solihull.gov.uk/Portals/0/Consultations/masterplanreport.pdf</u>

⁴³<u>http://eservices.solihull.gov.uk/mgInternet/documents/s62298/Solihull%20Town%20Centre%20Low%20Carbon%20E</u> nergy%20Network.pdf

originally predicted, and as such the capital cost, land requirement and pumping energy requirement meant that the open loop GSHP would not be an economic option.⁴⁴

93. In February 2020, Air Source Heat Pump and gas CHP were identified as the preferred low carbon heat supply option, and economic modelling confirmed this option meets all the Critical Success Factors.⁴⁵ The Council therefore resolved to submit an Outline Business Case to WMCA and this work is ongoing.

Other Solihull Low Carbon Initiatives

94. During 2014-15, Solihull Community Housing partnered with British Gas to complete the installation of external cladding to 31 high rise buildings fuelled by district heating in 23 of the buildings. SCH is able to claim renewable heat incentive payments for the heat generated by the biomass boilers, providing a regular income to support the on-going running costs. This work is supported by an energy information and support programme to ensure that residents make the most of the energy efficiency measures installed.⁴⁶

Renewable Energy Feasibility Study (due 2021)

95. Work is underway to commission a Renewable Energy Feasibility Study to inform the Low Carbon Energy Framework and facilitate the transition to a net-zero Borough by 2041.

Solihull Net Zero Action Plan (due 2021)

96. Work is underway on the Council's Net Zero Action Plan to inform the Low Carbon Energy Framework and facilitate the transition to a net-zero Borough by 2041.

Climate Change Adaptation and Resilience

- 97. The Council have prepared Topic Papers on the 'Natural Environment', 'Water and Flood Risk Management', 'Waste Management', and 'Open Space'. These set out how the relevant evidence base and consultation responses have respectively shaped Policy P10 'Natural Environment', Policy P11 'Water and Flood Risk Management', Policy P12 'Resource Management' and Policy P20 'Provision for Open Space, Childrens Play, Sport, Recreation and Leisure' in the Draft Submission Plan.
- 98. Further information on how these policies and others contribute to addressing Climate Change is provided in Section 6 of the Topic Paper below.

%20Town%20Centre%20Energy%20Network%20Cabinet%20Report.pdf

⁴⁴http://eservices.solihull.gov.uk/mgInternet/documents/s79830/Appendix%201%20-%20Town%20Centre%20Energy%20Network%20Cabinet%20Report.pdf

⁴⁵http://eservices.solihull.gov.uk/mgInternet/documents/s79830/Appendix%201%20-

⁴⁶ https://gbslep.co.uk/wp-content/uploads/2017/06/GBS-LEP-Low-Carbon-Energy-Plan-Summary-Report.pdf

6. How the Evidence has been used

Challenges and Objectives

99. In order to emphasise its central importance in the challenges and objectives in the Draft Submission Plan, Climate Change has been brought forward as Challenge A. The Challenges and Objectives have also been updated since the 2013 version. These changes include the need to reduce emissions from transport and to work with Airport to lower emissions from aviation; the link between GHG emissions and air quality; to address the Council's Climate Change declaration of October 2019 and the net-zero carbon emissions by 2041, as well as mitigation measures such as integrated green infrastructure.

Spatial Strategy and Vision

- 100. The spatial strategy has been developed in recognition of the need to accommodate significant levels of growth to meet housing need and maximise the potential of the opportunities at the UKC Hub Area, balanced with the need to decouple growth and carbon emissions.
- 101. The approach has sought to concentrate development first in brownfield urban areas, such as the UKC hub area and, in continuation of the 2013 policy, in the Solihull Town Centre. Due to the lack of available land in the main urban area to meet the growth needs of the Borough, new site allocations have been proposed as sustainable urban extensions in locations of higher accessibility or with the potential to deliver public transport improvements.
- 102. Furthermore, the Climate Change emergency declaration is central to the Vision by 'ensuring that all relevant activities are underpinned and fully integrated with measures to tackle the Climate Change emergency; recognising that this has a cross-cutting dimension that extends across economic, social and environmental objectives.'

Update to Policy P9

103. Policy P9 in the Draft Submission Plan has undergone a number of changes compared to the draft 2016 and adopted 2013 version. The rationale for these changes to the policy are outlined below.

Energy Efficiency

- 104. The 2016 draft policy P9 incorporated changes that reflected the outcome of the Housing Standards Review and the Written Ministerial Statement (2015), whereby the Code for Sustainable Homes was withdrawn and stated: *"From the date the Deregulation Bill 2015 is given Royal Assent, local planning authorities and qualifying bodies preparing neighbourhood plans should not set in their emerging Local Plans, neighbourhood plans, or supplementary planning documents, any additional local technical standards or requirements relating to the construction, internal layout or performance of new dwellings. This includes any policy requiring any level of the Code for Sustainable Homes to be achieved by new development..."⁴⁷*
- 105. The 2016 draft policy therefore did not include a target for on-site energy reduction, but promoted 'an energy hierarchy in seeking to reduce carbon emissions'. Strategic level measures to reduce carbon emissions, such as location of development in accessible places, and measures to adapt to climate change impacts were also included in the policy.

⁴⁷ <u>https://www.gov.uk/government/speeches/planning-update-march-2015</u>

- 106. As the preceding evidence in the Topic Paper shows, there have significant changes at a policy and legislative level, both nationally and locally, since the 2016 consultation on the Draft Local Plan Review.
- 107. National guidance on energy performance and sustainability standards was updated in the NPPF in July 2018, and the PPG on 15th March 2019.
- 108. NPPF (Para. 150b) "New development should be planned for in ways that... can help to reduce greenhouse gas emissions, such as through its location, orientation and design. Any local requirements for the sustainability of buildings should reflect the Government's policy for national technical standards."
- 109. PPG (Ref: 6-012-20190315): "In their development plan policies, local planning authorities:

Can set energy performance standards for new housing or the adaptation of buildings to provide dwellings, that are higher than the building regulations, but only up to the equivalent of Level 4 of the Code for Sustainable Homes.

Are not restricted or limited in setting energy performance standards above the building regulations for non-housing developments."

- 110. However, the NPPF is also clear that "The planning system should support the <u>transition to a</u> <u>low carbon future</u> in a changing climate... It should help to: shape places in ways that <u>contribute to radical reductions in greenhouse gas emissions</u>...and support renewable and low carbon energy and associated infrastructure" (Para. 148). Furthermore, "Plans should take a <u>proactive approach</u> to mitigating and adapting to climate in line with the <u>objectives</u> <u>and provisions of the Climate Change Act 2008</u>."
- 111. Since the publication of the revised NPPF and Planning Practice Guidance there have been these key changes which justify an uplift in energy efficiency standards over and above the Code Level 4 equivalent (19% uplift compared to Part L of the Building Regulations):
 - The Climate Change Act (2008) has been amended to incorporate a more challenging net zero carbon target for 2050, in response to advice from the CCC regarding measures required to keep global temperatures rises below 2 degrees (in accordance with the Paris agreements).
 - The WMCA and Solihull Council have committed to a more ambitious target of net zero carbon by 2041.
 - Research from the Tyndall Centre finds that if Solihull continues to emit carbon at the 2017 rate, then the carbon budget to 2100 will be expended by 2027.
 - The Government has consulted on a Future Homes standard by 2025 (uplift of 75-80% above current Building Regulations), and signalled their aspiration to uplift Part L of the Building Regulations by 30% in the short-term.
 - The WMCA and the Council are committed to a green recovery from the Covid-19 impacts and a multi-pronged approach to reducing carbon emissions.
- 112. The Council have tested the viability of implementing the Government's preferred interim standard (Option 2- 30% uplift of current Part L Building Regulations) and the zero-carbon homes, or Code Level 5 equivalent.
- 113. The viability evidence shows that the 30% uplift is generally viable at 2020 land and sales values and in combination with the wider Plan policy and infrastructure requirements. The net-zero carbon target is more challenging, however, the proposed Policy P9 sets out that

this target would be triggered from 2025, in line with the anticipated start date of the Future Homes standard. This will allow a longer lead-in time for the development industry to adapt to the higher standards.

114. There are precedent examples for setting and achieving higher than Code Level 4 energy efficiency standards since the publication of the Written Ministerial Statement in 2015, and have been found sound at Examination. These include the London Plan, Milton Keynes and Reading Plans.⁴⁸

Decentralised Heat and Energy Networks

115. The DSP Policy P9 has been amended to explicitly state that significant weight is attached to the installation of district, low carbon and renewable energy schemes. Such schemes are instrumental in lowering the net carbon emissions of the Borough and meeting the 2041 target. The Council has commissioned further work on a Renewable Energy Feasbility Study to update the CAMCO report from 2010 and a Net Zero Action Plan.

On-site renewable and/or low carbon energy sources

116. The DSP Policy P9 states that 15% of energy for major housing development and nonresidential developments of 1000+sqm should be derived from renewable and/or low carbon sources. This complies with powers set out in the 2008 Planning and Energy Act, and will complement the carbon reduction targets.

Non-residential buildings

117. The DSP Policy P9 has been amended since the 2016 version to include reference to conforming with BREEAM standards; Very Good for minor development and Excellent for major developments. The PPG does not restrict the setting of energy performance standards above the building regulations for non-housing developments.

Electric Charging Points

- 118. Although the overall carbon emissions for Solihull have declined year on year since 2005, the emissions from transport have not had a steady downward trajectory, and this is the case nationally. Average emissions per vehicle have decreased, but this has been counter-balanced by more vehicles on the road.
- 119. In order to facilitate uptake of electric vehicles, the Low Emissions Towns and Cities (LETC) guidance (2014)⁴⁹ recommends providing at least one charging point for electric vehicles per dwelling, and for non-residential development that 10% of parking spaces are provided with a charging point.
- 120. The role of planning policy in increasing the percentage share of electric vehicles in the market is also highlighted by the Council's Electric Vehicle Strategy (2020).
- 121. DPS Policy P9 therefore incorporates the recommendations from the LETC programme and Solihull' Electric Vehicle Strategy.

Criteria for renewable and low carbon energy and carbon offsetting schemes

⁴⁸ For example:

https://www.london.gov.uk/what-we-do/planning/planning-applications-and-decisions/pre-planning-applicationmeeting-service-0

https://www.milton-keynes.gov.uk/planning-and-building/plan-mk

https://www.reading.gov.uk/planning/planning-policy/new-local-plan/

⁴⁹https://go.walsall.gov.uk/Portals/0/Uploads/PollutionControl/letc_good_practice_air_quality_planning_guidance_ma y_2014.pdf

122. The DSP Policy P9 provides clearer detail that the 2016 draft policy on the criteria for such schemes, including in the Green Belt, to ensure that residential amenity is not compromised and due regard is paid to the historic and natural environment, as well as the landscape and highway safety.

Adaptation and resilience

123. In terms of measures that ensure development proposals are adaptive and resilient to climate change, the DSP Policy P9 carries over the provisions from the 2016 draft Policy. However, the DSP policy sets out that further guidance will be provided in a Climate Change SPD.

Wider Policy Impacts

124. As stated in the introduction, addressing Climate Change is a cross-cutting theme that runs throughout the Plan and is not confined to the remit of Policy P9. The table below illustrates how the wider policy framework has a beneficial impact on addressing the causes and impacts of climate change.

DSP Policy	Climate Change Impacts	
Policy P1 – UK Central Solihull Hub Area	Maximise connectivity within and beyond the site through integrated movement and transport networks;	
	Contribute to and co-ordinate transport, energy and power provision.	
	Minimise the use of natural resources and incorporate low/zero carbon and renewable energy principles.	
	Deliver a high quality strategic green and blue infrastructure network across the Hub area to enhance natural assets.	
P5 – Provision of Land for Housing	the opportunity to have accessibility improved so that sustainable travel (bus, rail, walking, cycling) is an attractive and viable option to residents. Optimise densities on site.	
P7 – Accessibility and East of Access		
P8 – Managing Travel Demand and Reducing congestion	Travel planning packages for site allocations and significant developments. Rapid Transit Policy.	
P10 – Natural Environment	Strong protection of natural assets and green infrastructure network and seek opportunities to enhance and connect through site allocations.	

125.

	10% net gain rather than no net loss of biodiversity on-site.
Policy P11 – Water and Flood Risk Management	Policy adopts 110L per person per day (Optional Water Standard) Level 2 SFRA has been carried out on proposed site allocations with potential flood risk (river and surface water) within their boundary. Strong policy on sustainable urban drainage systems.
Policy P12	Seeks to minimise waste from all sources.
Policy P14	Seek to safeguard important trees, hedgerows, natural habitats and woodlands, and where appropriate new woodlands.
Policy P15	Supportive policy framework for sustainable and low carbon construction principles, sustainable waste management, accessibility and enhancing biodiversity.
Policy P18	Supportive policy framework for open space provision, green infrastructure, active travel, initiatives to promote energy efficiency for both existing and new housing, and wider health impact assessments.
Policy P20	Open space standards for new developments, including for Accessible Natural Green Space, which will increase green infrastructure coverage and connectivity as well a quality of green space for multiple benefits.

7. Conclusion

- 126. This Topic Paper sets out how consideration of Climate Change has been a central theme in the preparation of the Local Plan Review, for example through the Sustainability Appraisal Framework, and in the formulation of the spatial strategy, vision and policies.
- 127. There are strong legislative and policy drivers for Local Plans to take a radical approach in reducing carbon emissions; and increasing the resilience of the built and natural environment to adapt to the causes of climate change.
- 128. The proposed policies have been subject to viability assessment, and the site allocations are supported by a wealth of evidence and concept masterplans.
- 129. The Local Plan will therefore play a crucial role in helping the Borough meet its climate change commitments.

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